

GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service United States Department of Agriculture

JULY 17, 2003

TM GRAIN TRANSPORT COST				<u>O</u>	<u>cean</u>
INDICATORS	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	Gulf	PNW
Indicator Value* for 07/17	97	146	86	144	167
Compared to Last Week	1	1	•		1

*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan

Army Corps Refuses To Lower Missouri River Level Despite Injunction. The Army Corps of Engineers attributed the refusal to drop the Missouri River water level despite a court injunction to conflicting rulings from different courts. On July 12, U.S. District Judge Gladys Kessler ordered a temporary reduction in the amount of water the Corps could release from its Missouri River dams this summer. The ruling is a preliminary injunction pending the determination of the substantial suit brought by American Rivers and others. The suit sought the order to protect certain endangered or threatened wildlife (the interior least tern, piping plover, and pallid sturgeon). The plaintiff maintained that prudent management of the water flow would protect the sandbar nesting ground of the endangered birds. On the other hand, the commercial interest group insisted that sufficiently high river levels should be maintained for the barge industry and nuclear power plants. A Nebraska court ruled last year that the river must have enough water for barges to navigate and power plants to operate. According to the Corps, "It is impossible to simultaneously comply with the conflicting flow requirements obtained in the two orders." Instead, the Corps has engaged the U.S. Fish and Wildlife Service in formal talks with the intention of developing a new "master manual" for the river's flow by spring 2004.

Assisting the growth of the barge industry for the past 40 years, the Corps has rebuilt most of a meandering 732-mile stretch of the River. Manipulation of the release of water from upstream dams has provided barge operators with a yearly reliable supply of water from April to November. Water flow on the Missouri River can be essential to maintaining adequate river levels on the Mississippi River for transport of grains and oilseeds from the Midwest to the Gulf of Mexico. Disruptions of postharvest barge shipments during a surge in export demand can adversely affect grain and oilseed exports. However, approximately one-half percent of our exports comes from the Missouri River. In 2000, 2 million tons of corn and 1.5 million tons of soybeans were transported on the Missouri River as compared to 28.8 million tons of corn and 12.6 million tons of soybeans which come down the river from the upper Mississippi and Illinois Rivers (AP 7/15, .N.Y. Times 7/16, USDA). Surajudeen.Olowolayemo@usda.gov

Winter and Low Water Impacted Early 2003 Barge Freight Rates. Because of the late opening of the upper Mississippi River, there were no first quarter barge freight quotes for Minneapolis-St. Paul. Average first quarter rates for St. Louis to New Orleans were \$6.10 per ton, 14 percent higher than the average of \$5.21. The higher rates were caused by extra costs barge companies incurred due to low water and colder than normal winter temperatures. Low water conditions limit the cargo capacity of a barge since it cannot sit as low in the water without risking running aground. By not loading the barge to the maximum capacity, the full potential of the barge is not utilized. During the second quarter, low water conditions improved to normal, and St. Louis average barge rates dropped to \$3.87 per ton, 13 percent lower than the average of \$4.39. Illinois River rates for the first quarter were \$8.68 per ton, 12 percent higher than the average of \$7.80 per ton. Again, weather conditions caused extra costs for the barge companies and forced an increase in rates. Second quarter rates dropped to \$6.31 per ton as weather conditions improved for navigation. Nick.Marathon@usda.gov

Report is prepared by Deen Olowolayemo, Johnny Hill and Karl Hacker, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm. E-mail_comments and questions to Surajudeen Olowolayemo@usda.gov

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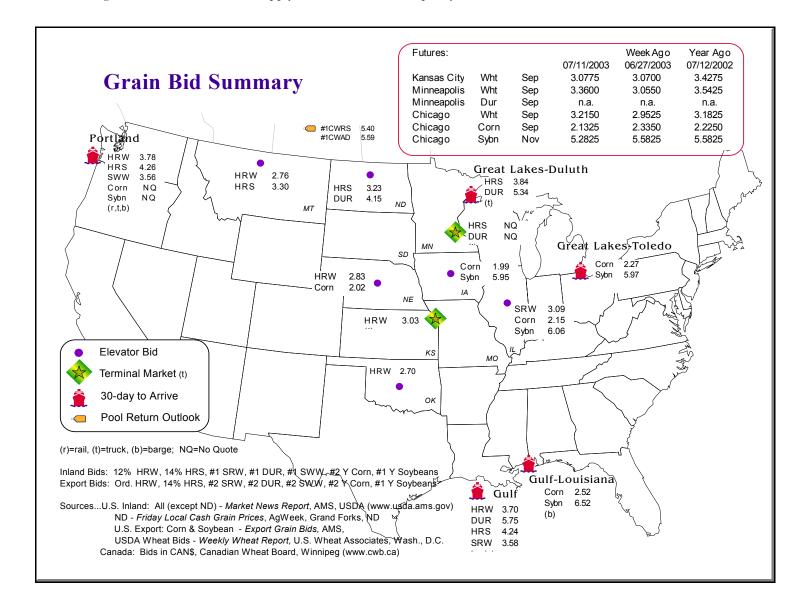
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)

Commodity	OriginDestination	This week	Last week
Corn	IL Gulf	-0.37	-0.36
Corn	NE Gulf	-0.50	-0.43
Soybean	IA Gulf	-0.57	-0.55
HRW	KS Gulf	-0.67	-0.63
HRS	ND Portland	-1.03	-1.08

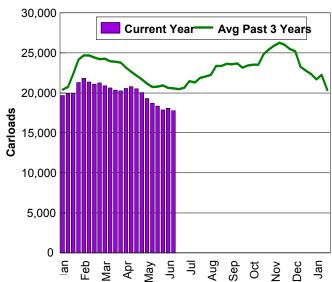
The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.



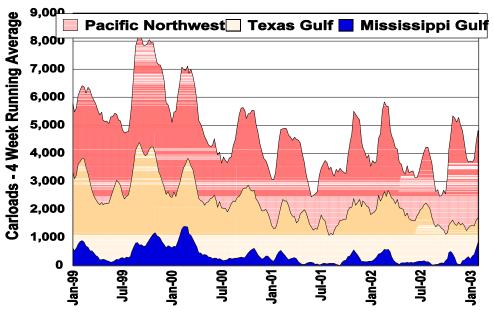
RAIL TRANSPORTATION

Rail Deliveries to Port (Carloads)									
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total				
Week Ending:									
06/25/03	14	2,303	2,052	512	4,881				
07/02/03	129	1,246	2,071	162	3,608				
YTD 2003	9,029	33,215	77,084	10,217	129,545				
YTD 2002	6,703	52,048	54,905	13,418	127,074				
% YTD 2002	135%	64%	140%	76%	102%				
Total 2002	11,112	83,799	111,719	21,551	228,181				
Total 2001	10,022	81,804	111,376	26,604	229,806				
Source: Transport	ation & Marke	eting/AM	S/USDA; (*)	Incomplete Da	ta				

Grain Car Loadings for Class I Railroads



Rail Deliveries to Port



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Class I Rail Carrier Grain Car Bulletin (Grain Carloads Originated and Grain Service Index)

	E	ast	West			West		U.S. Total	Can	ada
	CSXT	NS	BNSF	KCS	UP	U.S. Total	CN	CP		
07/05/03	2,603	2,902	6,649	622	6,314	19,090	3,162	2,858		
This Week Last Year	2,225	2,706	7,893	492	6,016	19,332	3,244	3,047		
2003 YTD	74,525	85,938	192,499	9,400	172,844	535,206	90,172	91,694		
2002 YTD	75,929	83,699	195,636	15,498	178,588	549,350	109,113	96,057		
% of Last Year	98%	103%	98%	61%	97%	97%	83%	95%		
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765		

U.S. Rail Covered Hopper Cars Online Index*
June-03 94 1 9

June-03 94.1 96.1 91.0 88.5 91.3 92.5

Source: Association of American Railroads; *Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

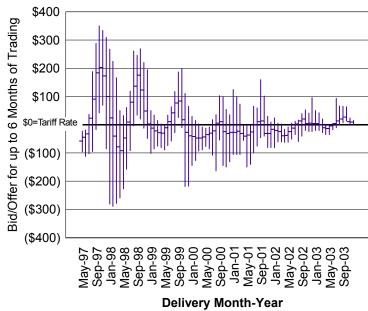
Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Railroad Car 'Auction' Results Average Premium/Discount to Tariff, \$/Car - Last Auction								
Delivery for:	Aug-03	Sep-03	Oct-03					
COT/N. Grain	\$43	\$48	\$29					
COT/S. Grain	\$0	\$0	\$9					
GCAS/Region 1	\$1	no bid	\$1					
GCAS/Region 2	\$1	\$1	\$3					

Source: Transportation & Marketing/AMS/USDA. COT=Certificate of Transportation; GCAS=Grain Car Allocation System

Secondary Rail Car Market Average Premium/Discount to Tariff, \$/Car - Last Week									
	Delivery Period								
	Jul-03	Aug-03	Sep-03	Oct-03					
BNSF-GF	\$40	\$46	\$48	\$47					
UP-Pool	\$14	\$25	\$24	\$32					

Secondary Rail Market Bid



Tariff Rail Rates for Unit Train Shipments

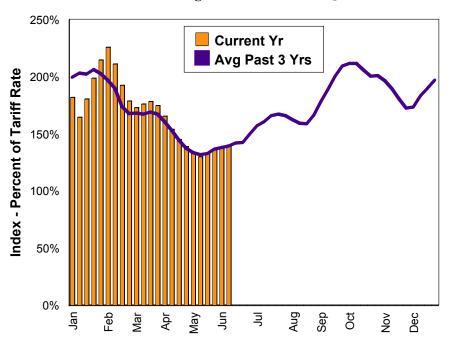
June 2003

Source: www.bnsf.com., approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu*

Date	Tariff				Rate	Rate Per	Rate/Per
Effective	Item	Commodity	Origin	Destination	Per Car	MT	Bushel*
07/07/03	113710	Wheat	Kansas City, MO	Galveston, TX	\$1,720	\$18.96	\$0.52
07/07/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
07/07/03	46540	Wheat	St. Louis, MO	Houston, TX	\$1,795	\$19.79	\$0.54
07/07/03	113710	Wheat	Kansas City, MO	Laredo, TX	\$2,180	\$24.03	\$0.65
07/07/03	15507	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
07/07/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
07/07/03	1132.002	Corn	Chicago, IL	Baton Rouge, LA	\$1,845	\$20.34	\$0.52
07/07/03	1132.03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$1,970	\$21.72	\$0.55
07/07/03	113210	Corn	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.47
07/07/03	1132	Corn	Des Moines, IA	Laredo, TX	\$2,595	\$28.60	\$0.73
07/07/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
07/07/03	1144	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
07/07/03	1144	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
07/07/03	1144	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
07/07/03	11441	Soybeans	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.51

BARGE TRANSPORTATION

Illinois River Barge Rate Index - Rate Quotes



The Illinois River Barge Rate Index averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The Index, along with Rate Quotes and Futures Market bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton: Index × 1976 Tariff Benchmark Rate per Ton

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate									
	7/9/03	7/2/03	Aug '03	Oct '03					
Twin Cities	205	216	210	257					
Mid-Mississippi	164	169	174	231					
Illinois River	155	160	165	232					
St. Louis	106	108	144	203					
Lower Ohio	114	115	148	225					
Cairo-Memphis	99	100	137	197					
Source: Transportation	n & Marketing	/AMS/USDA	A						

BARGE FUTURES MARKET Southbound Barge Freight Nominal/Cash Basis Values Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

		Contract	Rate		
Week ended	River/Region	Period	Futures	Cash	
7/15/03	St. Louis	Aug	n/a	145	
		Oct	n/a	215	
		Dec	n/a	135	
		Feb	n/a	135	
		Mar	n/a	135	
	Illinois River	Aug	n/a	170	
		Oct	n/a	243	
		Dec	n/a	175	
		Feb	n/a	185	
		Mar	n/a	165	

Barge Benchmark Tariff
Rates
Est. 1976 - Tariff No. 7'

Barge Benchmark Tariff
Rates
A 81 Cincinnati
3.99

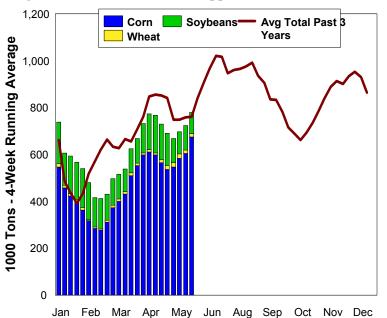
Owensboro 4.69

Memphis 4.04
3.14

Greenville
2.29

Source: St. Louis Merchants Exchange

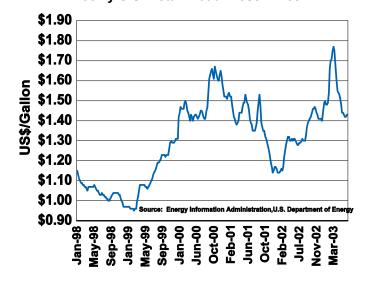
Barge Movements on the Mississippi River (Lock 27)



	<u>Corn</u>	Wht	Sybn	<u>Total</u>
Mississippi River				
Rock Island, IL (L15)	318	6	45	369
Winfield, MO (L25)	564	9	65	641
Alton, IL (L26)	803	12	95	913
Granite City, IL (L27)	822	12	90	927
Illinois River (L8)	217	0	31	248
Ohio River (L52)	14	24	0	46
Arkansas River (L1)	0	55	0	55
2003 YTD	15,279	927	4,540	21,198
2002 YTD	18,396	1,201	5,588	26,138
% of 2002 YTD	83%	77%	81%	81%
Total 2001	31,878	2,679	10,616	47,091

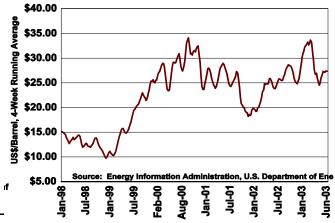
TRUCK TRANSPORTATION

Weekly U.S. Retail Road Diesel Price



The weekly **Diesel Price** provides a proxy for trends in U.S truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

Weekly Brent Crude Price, Friday Close



Crude Oil Prices (07/15/03)US\$ per BarrelThis WeekLast WeekLight Sweet Crude (NYMEX)30.8029.64Brent Crude28.8227.70

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Source: www.eia.doe.gov; *U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

GRAIN EXPORTS

				Wheat			Corn*	Soybean*	Total
	HRW	SRW	HRS	SW W	DUR	All			
07/03/2003	1,760	551	1,257	604	145	4,316	6,180	4,442	14,938
This Week Year Ago	994	396	886	559	127	2,962	5,933	2,372	11,267
Commulative Exports-0	Crop Year								
03/04 YTD	805	127	416	270	8 1	1,699	33,596	27,272	62,567
02/03 YTD	713	327	369	280	98	1,786	39,667	27,205	68,658
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185

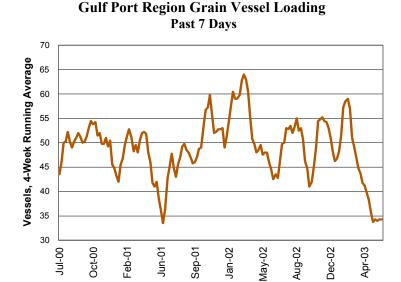
Select U.S. Port Regions - Grain Inspections for Export (1,000 Metric Tons)												
	Pacific Region		Mississippi Gulf		Texas Gulf		Port Region Total					
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
07/10/03	118	61	49	107	670	133	127	0	0	228	910	127
2003 YTD	4,278	2,678	2,606	2,196	14,978	9,678	2,550	529	50	9,563	26,852	3,128
2002 YTD	4,451	2,347	1,400	3,093	20,678	9,829	3,392	141	247	8,199	33,600	3,780
% of 2002 YTD	96%	114%	186%	71%	72%	98%	75%	375%	20%	117%	80%	83%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906
Source: Federal Grain Inspection Service			YTD-Y	ear-to-Da	ate							

U.S. Grain Inspected for Export



Select Canadian Port Export Inspections 1,000 Metric Tons, Week End Summary									
06/19/2003 Vancouver	Wheat 105	<u>Durum</u> 5	<u>Barley</u>						
Prince Rupert									
Prairie Direct	5								
Thunder Bay	18								
St. Lawrence	4,492	2,329	290						
2001/02 YTD	10,666	2,963	961						
2002/03 YTD	4,620	2,334	290						
% of Last Year	43%	79%	30%						
Source: Canadian Grains Commission, Crop Year 8/1-7/31									

Port Region Ocean Grain Vessels								
	Gulf			Pacific Northwest	Vancouver B.C.			
		Loaded	Due Next	ţ				
	In Port	7-Days	<u>10-Days</u>	In Port	In Port			
07/03/03	29	40	61	3	7			
07/10/03	39	56	55	5	7			
2002								
Range	(1555)	(3366)	(4482)	(315)	(012)			
2002 Avg	35	51	65	8	5			
Source: Transportation & Marketing /AMS/ USDA								



\$40 \$30 US\$/Metric Ton \$20 \$0 (\$10) 1998 Q3 1998 Q3 1999 Q1 2000 Q1 2001 Q1 2002 Q3 2002 Q1 2003 Q1 1997 Q3 1997 1999 Q3 2000 Q3 2001 g Rate - Gulf to Japan Rate - PNW to Japan

Japan

Spread - Gulf vs. PNW to

Grain Vessel Rates to Japan

Quarterly Ocean Freight Rates Average Rates & Percentage Changes, U.S. Dollars/Metric Ton									
		, .				% Chang e			
			Pacific NW to						
1.53	\$19.43	62%	Japan \$1	9.33	\$11.03	75%			
-	\$46.92	-							
8.98	\$13.58	40%	Argentina/Bra	zil to					
1.75	\$15.84	37%	Med. Sea \$2	24.50	\$16.98	44%			
1.88	\$12.62	73%	N. Europe	-	\$17.16	-			
			China \$3	2.50	-	-			
	003 Qtr 1.53 - 8.98 1.75	003 2002 Qtr 2 nd Qtr 1.53 \$19.43 - \$46.92 8.98 \$13.58 1.75 \$15.84	O03 2002 % Qtr 2 nd Qtr Change 1.53 \$19.43 62% - \$46.92 - 8.98 \$13.58 40% 1.75 \$15.84 37%	003 2002 % 2nd Qtr 2nd Qtr Change Pacific NW to 1.53 \$19.43 62% Japan \$1 - \$46.92 - 8.98 \$13.58 40% Argentina/Bra 1.75 \$15.84 37% Med. Sea \$2 1.88 \$12.62 73% N. Europe	003 2002 % 2003 Qtr 2 nd Qtr Change Pacific NW to 1.53 \$19.43 62% Japan \$19.33 - \$46.92 - Argentina/Brazil to 1.75 \$15.84 37% Med. Sea \$24.50	003 2002 % 2003 2002 2nd Qtr 2nd Qtr 2nd Qtr 2nd Qtr Pacific NW to 1.53 \$19.43 62% Japan \$19.33 \$11.03 - \$46.92 - 8.98 \$13.58 40% Argentina/Brazil to 1.75 \$15.84 37% Med. Sea \$24.50 \$16.98 1.88 \$12.62 73% N. Europe - \$17.16			

Ocean Freight Rates for Selected Shipments - week ending 7/12/03								
Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)			
PNW	Taiwan	Heavy Grains	Jul 10/20	56,000	\$19.50			
PNW	Taiwan	Heavy Grains	Jul 10/20	56,000	\$19.50			
U.S. Gulf	Laffiteau, Haiti	Wheat	Jul 10/20	9,850	\$60.75*			
U.S. Gulf	Peru	Grains	Jul 18/27	5,000	\$37.64			
U.S. Gulf	Japan	Heavy Grain	Jul 25/30	54,000	\$29.40			
River Plate	China	Heavy Grain	Jul 15/25	55,000	\$34.75			

Source: Maritime Research Inc.

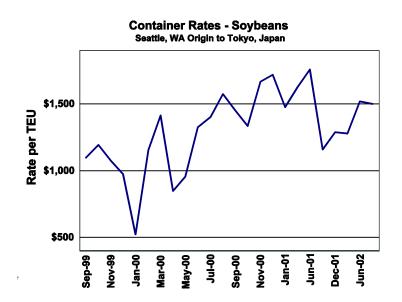
Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

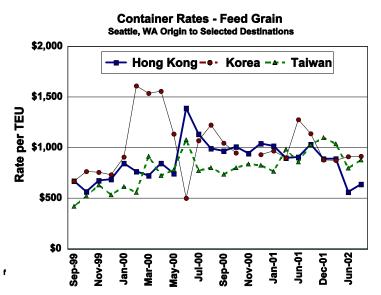
*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

CONTAINER

Container Ocean Freight Rates

Average Rate per TEU, Weighed by Shipping Line Market Share Source: Transportation & Marketing/AMS/USDA, Quarterly Updates





Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.